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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/051,073

01/22/2002

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2001P014480

3393

21254 7590 08/03/2007
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EXAMINER

PAN, YUWEN

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

08/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/051,073

Applicant(s)

MURAKAMI, TAKASHI

Examiner

Yuwen Pan

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 and 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed 5/31/07 have been fully considered but they are not persuasive.

Per claim 1, the applicant argues that there is no motivation to combine the teaching of Nakamura with applicant admitted prior art (AAPA) and the applicant points out that one of ordinary skill in the art would not have been motivated to modify the device of the AAPA by combining the switch circuit of Nakamura with the device of the AAPA because the AAPA already includes a device for detecting a better signal between received signals. The examiner respectfully disagrees. Since there is no further disclosure regarding with what kind of the device for detecting a better signal under the applicant's admission, from examiner point of view, one of ordinary skill in the art would have been motivated to seek a practical device such as switch, taught by Nakamura, in which could combine with AAPA or replace applicant's device for detecting a better signal between received signals in order to provide such function of selecting a better signal.

The applicant further argues that "one of ordinary skill in the art would not have been motivated to modify the AAPA as suggested by the Examiner because such modification would change the principle of operation of the device of the AAPA". The examiner respectfully disagrees. Conversely, the teaching of Nakamura supports and reinforces the AAPA's principle by utilizing "good diversity" to accomplished on signal reception (see column 2 and lines 42).

Regarding to the "demodulator prior to" issues, the examiner has response to such arguments filed on 3/26/07, Non-final Office Action. The context of the response to argument is incorporated herein by reference and is not repeated again, for brevity.

2. Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-8, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (hereinafter AAPA) in view of Nakamura (US006243563B1) and Wataya (JP09046110).

Per claim 1, AAPA admitted in a prior art telephone set such as a foldable portable telephone in which comprises two housings, when the sets is in use for communication, radio signals are receive by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals, a better sensitivity one of the radio signals is detected and sent to a radio circuit via a cable (see the specification page 1), the radio circuit is located at one of the portable telephone housing (see figure 6). AAPA doesn't expressly teach a switch for selecting a better detected receiving signals. Nakamura teaches that a dedicated switch circuit for selecting a better signal between a common antenna and reception dedicated antenna. It would have been obvious to one ordinary skill in the art to combine the teaching of Nakamura with AAPA such that without such switch

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the portable phone is hardly to select a better signal and the switch would provide a structure for good diversity to accomplish a better signal reception (see column 2 and lines 42).

Combination of AAPA and Nakamura doesn't teach that the physical location of the switch could separate from the radio circuit since AAPA shows that separated paths are established between the lower housing and upper housing for signaling and power voltage. Wataya teaches one signal cable is able to carry the load of transmitting, receiving signals, control signal and power voltage. It clearly demonstrated that two electronic components are able to function normally regardless the physical location of them. For example, the switch 8 is controlled by the power supply section 9 in which is operating based on the direct current voltage supplied (battery) from the body 3 that is connect to the body where the switch located via a single coaxial cable (see the translation of Wataya 17). It would have been obvious to one ordinary skill in the art to combine the teaching of Wataya with the combination of AAPA and Nakamura such that two electronic components are able to function normally regardless the physical location (as two housings of a foldable phone) of them.

Same arguments apply, *mutatis mutandis*, to claim 2, 3, 4, and 5.

Per claims 6, and 14, Wataya further teach that the radio circuit and the cable are connected in parallel via coils and capacitors (see figure 1 and items 10, 17 and 32), and power from the battery is supplied via the coil side to the radio circuit (see item 22), and a radio signal received by either one of the antennas is transmitted via the capacitor side to the radio circuit. Per claims 7 and 15-18, Wataya further teach that the cable is a coaxial cable (see figure 1 and item 32).

Per claim 7, Wataya further teaches that the switch and the radio circuit are connected by a coaxial cable (see figure 1 and item 2).

Same arguments apply, *mutatis mutandis*, to claims 15-18.

Per claim 8, AAPA admitted that prior art teaches a portable telephone set comprising a radio circuit for demodulating a radio signal received by antenna and transmitted via a cable (see figure 6 and item 9); and a battery for supply power to the radio circuit (item 12 and 2). AAPA doesn't teach that the battery and the radio circuit are interconnected by the cable and wherein power from the battery is supplied via the cable to the radio circuit. Wataya teaches that one single coaxial cable to convey both radio signals and power and connect two housings (see figure 1 and item 2). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with AAPA such that it would reduce the size of the wireless terminal and save resources. AAPA doesn't expressly teach a switch for selecting a better detected receiving signals. Nakamura teaches that a dedicated switch circuit for selecting a better signal between a common antenna and reception dedicated antenna. It would have been obvious to one ordinary skill in the art to combine the teaching of Nakamura with AAPA such that without such switch the portable phone is hardly to select a better signal and the switch would provide a structure for good diversity to accomplish a better signal reception (see column 2 and lines 42)

Allowable Subject Matter

5. Claims 9-13, and 29-22 are allowed.
6. The following is an examiner's statement of reasons for allowance: see applicant's arguments, file don 1/09/2007, pages 12 and 13.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anderson D. Matthew can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Yuwen Pan
July 30, 2007



MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER